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ABSTRACT

This document presents a review of the literature on the nature of alcohol and other drug problems among Hispanic American youth, analyzes a series of programs funded by the Office for Substance Abuse Prevention (OSAP) for Hispanic Americans, and presents the results of an evaluation of those programs. The section reviewing literature on drug abuse among Hispanic American youth notes the lack of reliable information on this population and the shortcomings of the available studies. However, the report does note the following: (1) adolescent Spanish Americans represent the third largest group of drinkers; (2) Hispanic American female adolescents have low rates of drug use; (3) there are important gender differences in drug use; (4) drug use increases with age; and (5) recent data show lower rates of use among Hispanic Americans as compared to Anglo Americans. The report emphasizes the importance of Hispanic culture in any analysis of services for Hispanic Americans. The study of OSAP demonstration projects resulted in the following findings: (1) most projects identified at-risk youth from diverse sources; (2) most focused on the economically disadvantaged; (3) the projects used a variety of approaches; (4) nearly half are developing specialized curriculum; (5) many positive outcomes were anticipated; (6) outreach to the community was a prominent part of most programming; and (7) similar implementation problems arose across programs. Included are four tables, two graphs, recommendations, a copy of the site visit evaluation questionnaire, and 78 references. (JB)

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Office for Substance Abuse Prevention

Alcohol and Other Drug Use Among Hispanic Youth

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OSAP Technical Report—4

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
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Office for Substance Abuse Prevention
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OSAP Technical Reports are prepared by the Division of Demonstrations and Evaluation, Office for Substance Abuse Prevention (OSAP), and published by its Division of Communication Programs. The primary objective of the series is to facilitate the transfer of prevention and intervention technology between and among researchers, administrators, policymakers, educators, and providers in the public and private sectors. At times, this series will publish reviews of innovative or exemplary programming models and reviews of evaluative studies conducted by OSAP grantees.

This techical report was prepared by Melvin Delgado, Ph.D., School of Social Work, Boston University, and Sylvia Rodriquez-Andrew, Ph.D., Department of Sociology and Social Work, Texas Lutheran College, under Professional Services Contract number 88M072722401D. Eladio Pérez-Zayas served as OSAP Project Officer.

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OSAP Technical Report Series
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Foreword

Hispanics will soon be the largest ethnic minority population in the United States. This technical report makes an important contribution to our knowledge about the prevention of alcohol and other drug problems among Hispanics by carefully analyzing a variety of relevant issues pertaining to Hispanic youth.

The report presents a review of the literature that offers many insights into the complex nature of alcohol and other drug problems among Hispanics. It also analyzes programs for Hispanics as outlined in the proposals of the 16 Office for Substance Abuse Prevention (OSAP) projects (which began in 1987) targeting Hispanic communities. It presents the results of telephone interviews and site visits conducted when most of the programs were well into their first year of implementing their OSAP grants. And it concludes with a set of recommendations for further action and study.

One thing is clear: the needs and the gaps in services are significant. This technical report advances our knowledge of areas that require further study, as well as actions that can be taken based on what is now known.

We are eager to share this report with the field. It builds a broader understanding of issues that are critically important in designing and implementing effective services for Hispanic populations.

Elaine M. Johnson, Ph.D.
Director
Office for Substance Abuse Prevention

Preface

In 1986, the Office for Substance Abuse Prevention (OSAP) was created as a result of the Anti-Drug Abuse Act to develop multidimensional prevention programs to focus on high-risk youth. A total of 130 grants were funded in fiscal year 1987. These programs are located in 39 States and target youth in diverse locations, ethnic groups, and age groups and with various high-risk characteristics. Twelve percent (16) of the funded OSAP projects target a predominately Hispanic population, while another 6 percent (8) focus on both African Americans and Hispanics.

This technical report is intended to increase our current understanding of alcohol and other drug use among Hispanic youth. While relatively little is known about prevention strategies for Hispanic youth, recent publications focusing on these youth are encouraging (Ames and Mora 1989). This report describes emerging characteristics of Hispanic high-risk target populations, explores the role of culture in prevention strategies, and provides general recommendations for continuing and expanding current prevention, intervention, and treatment efforts with Hispanic high-risk youth.

The bulk of this report is based on information contained in the grantees' applications for initial funding and grantees' responses to the site visit questionnaire conducted by the authors (see appendix) during their first year of operation. The report provides an overview and description of the 16 programs, target populations, risk factors, prevention strategies, anticipated outcome indicators, and recommendations. These recently funded programs offer an opportunity to examine emerging risk factors and prevention interventions designed specifically for high-risk Hispanic youth.

This technical report begins with considerations about studies of Hispanics and a review of the literature on alcohol and other drug use among Hispanic youth. This is followed by a description and summary of emerging issues based on the OSAP grant applications and site visits, and general and programmatic recommendations in the areas of prevention, intervention, and treatment.

Bernard R. McColgan
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and Evaluation

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Programs

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Executive Summary

Demographic Profile of Hispanics

The number of Hispanics Americans is projected to reach 29 million by the year 2000—10 percent of the total population of the United States. By 2050, they will be the largest ethnic minority group. The rapidly changing demography of the U.S. Hispanic population must be a consideration in any discussion of social and health problems among Hispanics.

The U.S. Hispanic population can be characterized as (1) highly concentrated in certain States, regions, and urban areas, (2) young in comparison with the national average (one-third of Hispanics are under the age of 15, compared with approximately one-fifth of the general population), (3) primarily consisting of three main subgroups—Mexican American, Puerto Rican, and Cuban, and (4) of low educational attainment in comparison with the majority population (1980 U.S. Census). All these factors have important implications for the alcohol and other drug prevention field.

Examining the Drug Problem Among Hispanic Youth

The literature review for this technical report included a strong focus on the nature and extent of alcohol and other drug use among Hispanic youth. Although numerous surveys of the use of alcohol and other drugs among adolescents have been conducted in recent years, relatively little is known about the problem among ethnic and racial adolescent minorities.

Assessing the problem among Hispanic youth is complicated by certain factors that characterize the discussion of many issues related to Hispanics, including alcohol and other drug use:

- *Lack of a clear definition of "Hispanic."* Although Hispanic is a widely used term, different definitions are common. The various criteria for defining Hispanic include country of origin, primary language, surname, parents' country of origin, and birthplace. However, most studies of alcohol and other drug use among Hispanic adolescents do not provide a specific definition.

- *A tendency to combine Hispanics with other people of color into a "minority" category.* Lumping Hispanics with other ethnic groups is an overly simplistic approach that fails to consider important cultural and linguistic differences.

- *A lack of specificity in relating findings to age and gender.* Studies tend to combine males and females even though the literature suggests important gender differences in alcohol and other drug use and related behaviors among Hispanic youth. Rarely do studies specify exactly what is meant by youth. Young teens, older teens, secondary school population and adolescent are often used as if they were synonymous.

- *Shortcomings related to research methodology and sample selection.* These include (1) the tendency to study school populations but not dropouts, (2) a focus on low-income populations, (3) a focus on illicit drugs but not alcohol, (4) small, nonrandom, mostly urban samples, (5) overreliance on certain urban areas (Los Angeles and New York) and regions of the country (West and Northeast), and (6) overreliance on quantitative studies without sufficient qualitative studies.

- *Limitations related to the use of drug statistics.* Three main factors come into play: (1) an overreliance on arrest and treatment data (these statistics may overrepresent Hispanics and other people of color), (2) the types of drugs frequently focused on by enforcement and treatment programs (i.e., primarily illicit drugs), and (3) undercounting by the U.S. census, particularly in relation to undocumented Hispanics. All of these problems may distort the number of Hispanics with alcohol and other drug problems.

What Do We Know About Alcohol and Other Drug Problems Among Hispanics?

Given the limiting factors noted above, some conclusions can still be drawn about the nature and extent of alcohol and other drug use among Hispanics.

- A 1975 National Survey of Adolescent Drinking Patterns found that the largest proportion of adolescent drinkers were Anglo Americans (75 percent), followed by American Indians (73 percent) and Spanish Americans (68 percent). African American adolescents reported the lowest number of drinkers among all the major ethnic groups studied (59 percent).

- According to the 1986 National Institute on Drug Abuse (NIDA) Household Survey, while both African American and Hispanic female adolescents' alcohol and other drug use is generally lower than it is for Anglo American females, rates of cocaine use are similar for Anglo and Hispanic females. Surprisingly, lifetime prevalence of inhalant use was slightly higher for Anglo females than either Hispanic or African American adolescent females. Early studies found disproportionately higher rates of inhalant use among Hispanic adolescents, but recent school surveys indicate that this gap may be narrowing.

- There are important differences in the use of alcohol and other drugs between Hispanic males and females. According to the 1985 NIDA Household Survey, for example, Hispanic females (aged 18-25) were nine times more likely (6.4 percent) to report some lifetime use of inhalants than Hispanic males (0.7 percent). For comparison, 18 percent of Anglo males and 7.2 percent of African American males reported inhalant use.

- The 1987 Hispanic Health and Nutrition Examination Survey (HHANES) reported on the prevalence of marijuana, cocaine, inhalant, and sedative use among Mexican Americans, Puerto Ricans, and Cuban Americans aged 12 to 44 (N=8,021). Of Mexican Americans aged 12 to 17, 31 percent reported some lifetime use of marijuana compared to 26 percent of similar aged Puerto Rican youth. The small sample size of Cuban Americans resulted in combining respondents into two age categories, 12-24 and 25-44. Of those aged 12-24, 21 percent reported having used marijuana at some time in their lives. This figure may be misleading because of the large age span.

- The HHANES study also suggested that drug use among Hispanics increases with age as it does with youth in the general population.

- Several recent studies of alcohol and other drug use among Hispanics have revealed interesting comparisons with non-Hispanics. Trotter's (1982) comparison of Anglo and Mexican American college students from a similar geographical location found lower levels of use among both Mexican American males and females than Anglo males and females. Mata's (1986) survey of Texas rural youth also found a higher frequency of alcohol use among Anglos (63 percent) than Mexican Americans (56 percent). Chavez et al.'s (1986) survey of rural students in grades 7-12 found that both Anglo and Mexican American rural students were 30 percent more likely to report

alcohol use in comparison with a representative national sample. Generally, Mexican American youth were twice as likely to report lifetime use of marijuana, diet pills, stay awake pills, cocaine, hallucinogens, and tranquilizers as Anglo students.

- In the literature surveyed for this technical report, the study of alcohol use among Hispanic adolescents far outweighed the study of Hispanics' use of other chemicals.

The Role of the Hispanic Culture

It is particularly important for programs and services directed at Hispanics to take culture and level of acculturation into account. Several researchers, for example, have focused on the importance of natural support systems within the Hispanic community. These comprise four major types: (1) extended family and friends, (2) folk healers, (3) religion, and (4) merchant and social clubs. Language preference is another important aspect of program and service delivery. The role of culture in any prevention effort will depend on how this concept is defined, operationalized, measured, and analyzed.

Risk Factors Among Hispanic Youth

Although much is now known about risk factors among youth in the majority culture, very little is known about specific risk factors or combinations of risk factors that are salient for minority youth. Even less is known about what type(s) of prevention strategies will be effective in addressing those risk factors. Although there is a paucity of relevant studies, those studies that are available suggest that family factors (especially parental use) and socioenvironmental factors (e.g., the impact of poverty, availability of alcohol and other drugs) are particularly important. Yet much study in this area remains to be done.

The OSAP Demonstration Projects

The 16 OSAP demonstration projects in Hispanic communities cover a wide range of settings, locations, age groups, risk factors, and approaches. Highlights of a review of the projects' proposals and the findings from telephone surveys and site visits include the following:

- With the exception of three projects that focus exclusively on school populations, high-risk youth are identified from several diverse sources such as juvenile justice, mental health clinics, local and State social service agencies, public housing, and community-based organizations. All but one of the projects include schools as sources of referrals. Seven of the 16 projects specifically include children of alcohol and other drug abusers as a target group.
- Ninety-four percent of the grantees focus on economically disadvantaged youth.
- More than half of the targeted youth have either dropped out of school or are at risk of dropping out.
- Two of the projects are using existing approaches with their target population. The remaining 14 programs include approaches ranging from the development and dissemination of bilingual materials to residential treatment services. The majority have a broad focus that includes training key professionals such as teachers and law enforcement officers to identify and refer youth to appropriate services. Parents are targeted by almost one-third of the programs.
- Almost half of the projects are developing some kind of specialized curriculum.
- Anticipated program outcomes include (1) improving family and peer relationships, (2) improving young people's social skills and their parents' parenting skills, (3)

reducing alcohol- and other drug-related offenses and behaviors, (4) increasing knowledge and awareness of alcohol and other drug use, (5) decreasing the frequency of incidents of reported drug use, and (6) increasing self-esteem.

- With few exceptions, outreach to the community is a prominent part of programming.
- A number of implementation issues are noted such as the challenge of finding qualified Hispanic staff members and developing culturally relevant evaluation techniques.

Recommendations

The literature review and survey of OSAP programs suggest several areas of further research or program development that can be helpful to programs in Hispanic communities:

- Longitudinal studies are needed to obtain an indepth understanding of changes in patterns of alcohol and other drug use among Hispanics over time.
- Researchers must clearly define what they mean by Hispanic and minority. Failure to delineate these terms seriously limits the generalizability of research findings.
- More research is needed regarding the use of specific substances by specific Hispanic subgroups. The quantity of research done on Mexican American alcohol and other drug use is disproportionately low, for example, and relatively little is known about the impact of "new" drugs such as crack.
- Specific information on environmental factors is lacking. For example, existing research indicates that Hispanic communities have higher rates of liquor establishments, crime, and alcohol- and other drug-related arrests. More research in this area is needed.
- Projects designed to help Hispanic youth remain in school are needed, beginning at an early age. Although most of the OSAP projects have school-based components, few specifically address advocacy efforts on the part of the community to make local schools more sensitive to the needs of Hispanic students.
- More can be learned about how to use Hispanic natural support systems in prevention approaches. For example, religious organizations or the extended family can be educated to the realities of alcohol and other drug use in order to support adolescents in withstanding peer pressure.
- Innovative outreach models are needed that will be effective in attracting and retaining Hispanic youth in programs.
- There is a distinct lack of imaginative approaches to working with gangs, yet gangs are increasingly a factor in the lives of inner-city Hispanic youth.
- Publications and media that reflect the Hispanic culture are needed and will be helpful in supporting and advancing prevention efforts in Hispanic communities.

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Considerations in Research With Hispanic Youth

Demographic Profile of Hispanics

The Hispanic population in the United States can best be categorized as experiencing rapid increase in size; highly concentrated in certain States, regions, and urban areas; young; primarily consisting of three Hispanic ethnic groups; and poorly educated. These factors have profound implications for alcohol and other drug prevention and intervention strategies.

Population

According to the 1980 U.S. census, approximately 14.6 million Hispanics live in the United States. Mexican Americans are the largest subgroup, followed by Puerto Ricans and Cubans (figure 1).

Between 1970 and 1980, the Hispanic population in the United States increased by 61 percent compared to 11 percent for the general population. This increase, which by most estimates continued into the 1980s, is attributed to high fertility and immigration. The 1980 fertility rate of Hispanic women aged 15-44 was 95.4 per 1,000—approximately 32 points higher than for Anglo non-Hispanic women (62.4) and 5 points higher than for African American women (90.7).

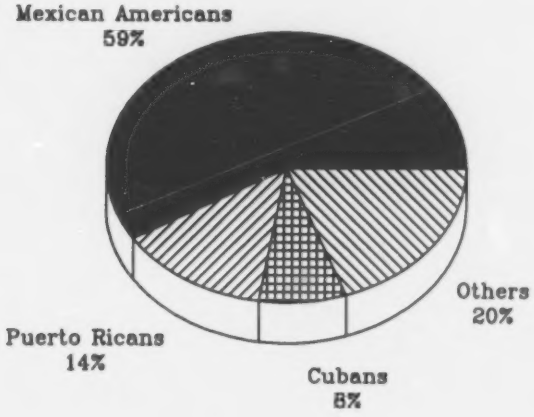

Figure 1. Hispanic groups in the United States

The impact of immigration and the number of undocumented Hispanics in the United States has received increased public attention in the past several years. The difficulty in reaching and counting this population, particularly in large urban areas, presents a serious challenge in the field of human services, and alcohol and other drug abuse, in particular.

The number of Hispanics is projected to grow to 29 million by the year 2000—10 percent of the total population in the United States. By 2050, Hispanics will be the largest minority group. Consequently, alcohol and other drug abuse policymakers must focus on the trends and needs of this population.

Geographic Distribution

California (31.1 percent), Texas (20.4 percent), New York (11.4 percent), Florida (5.9 percent), and Illinois (4.4 percent) account for 73.2 percent of all Hispanics in the United States. Hispanics are the most urbanized ethnic group in the United States, with 83 percent living in urban areas compared to 77 percent for African Americans and 66 percent of Anglos. Approximately half of all Hispanics live within 10 metropolitan areas, with Los Angeles (2 million) and New York (1.5 million) having the greatest number.

Youthfulness

One-third of the Hispanic population in the United States is under the age of 15, compared to approximately 20 percent of the general population. Puerto Ricans and Mexican Americans, with a median age of 22, are the youngest Hispa-

nic groups, and Cubans, with a median age of 38, the oldest. As a group, Hispanics have a median age of 23, compared to 25 for African Americans and 31 for the general population.

Educational Achievement

Over the next 20 years, Hispanics will become the majority of the school population and the majority of the work force in many areas of the Nation. Yet the gap in achievement between Hispanics and other groups is the widest and most serious in education. Schools very often are the primary focus of Hispanic alcohol and other drug use prevention efforts. However, as noted by the National Commission on Secondary Schooling for Hispanics, it will require a prodigious national effort to make this system more responsive to Hispanic students. This is true despite recent advances Hispanics have made—e.g., between 1976 and 1983, combined SAT scores for Mexican Americans increased by 22 points (686 to 708), and Puerto Ricans increased their scores by 4 points (761 to 765).

- The schools Hispanics attend are often very crowded, poorly equipped, and have lower per-pupil budgets than other schools in their areas.

- Hispanics are often overage for their grade levels because of language problems in earlier years. Thus, almost one in four of all Hispanics who enter high school are overage.

- Two-thirds of Hispanics now attend schools where more than half of the students are minority.

One consequence of the above conditions is that the Hispanic dropout rate is extremely high. For example, New York City, widely regarded as having the best educational attainment level for Puerto Ricans in the United States, has an estimated school dropout rate that ranges from a low of 41.7 percent to a high of 80 percent (Fitzpatrick 1987).

Alcohol and Other Drug Use Among U.S. Youth

Surveys on adolescent alcohol and other drug use have proliferated, yet relatively little is known about factors or combinations of factors that influence or determine whether a young person will abstain, experiment, or regularly use alcohol and other drugs. Even less is known about the extent of alcohol and other drug use among ethnic and racial adolescent minorities.

During the last three decades, youthful alcohol and other drug use has become a significant problem facing families, schools, and communities throughout the country. A 1962 survey found that only 1 percent of all youth aged 12 to 17 and 4 percent of 18- to 25-year-olds reported marijuana use (Baron 1983). In 1986, 58 percent of high school seniors had used an illicit drug at some time in their lives, although 34 percent reported having used only marijuana. Approximately 4 in 10 seniors used other illicit drugs. While alcohol use is reported by 9 in 10 students, the monthly prevalence of alcohol use among seniors has gradually declined from 72 percent in 1980 to 65 percent in 1986 (Johnston et al. 1987). Richards' (1981) analysis of drug abuse trends suggests that by 1995, drug use patterns will either stabilize or increase, but not decrease.

Perhaps the most troubling aspect has been the decreasing age of first use of alcohol and other drugs. Early onset of drug use has been associated with adverse effects on the adolescent's psychosocial and physical development as well as increased probability of extensive and persistent involvement with other dangerous drugs (Kandel 1975, 1982). Robins and Przbeck (1985) further indicated that initiation of drug use prior to age 15 is a consistent predictor of later drug abuse.

Another major concern has been the increasing frequency of multiple drug use. Although multiple or polydrug use is not a new phenomenon, most surveys simply list the substances and ask respondents to indicate age of first use, current frequency, and quantity of use for each drug.

Consequently, information on polydrug use remains relatively scarce.

Limiting Factors

The literature on Hispanic adolescent alcohol and other drug use is marked by five key factors that seriously impede a comprehensive understanding of the impact of alcohol and other drugs on Hispanic adolescents and their community (Gilbert and Alcocer 1988; Humm-Delgado and Delgado 1983): (1) lack of specificity on what is meant by "Hispanic," (2) a tendency to combine Hispanics with other people of color into a category of "minority," (3) confusion related to age and gender regarding findings and implications for services, (4) shortcomings in research methodology and sample selection, and (5) limitations related to use of drug statistics.

Definition of Hispanic

Research and program development literature in human services make extensive reference to the importance of clearly defining who will participate or benefit from a study. Although the term Hispanic is widely used in this society, different definitions of Hispanic are common (Humm-Delgado and Delgado 1983).

The various criteria for Hispanic include country of origin, primary language, surname, parents' country of origin, location of birth, and self-disclosure. However, most studies related to Hispanic adolescent alcohol and other drug use do not provide a specific definition of who is being addressed. This serious limitation in the literature makes it arduous, if not impossible, to draw specific implications for various Hispanic groups.

Mexican Americans have experienced the most diversity in terminology. Lampe (1984) found that the various terms to describe Mexican Americans included Latin American, Latino, Hispanic, Chicano, Mexicano, Mexican American, Spanish American, and Spanish surname, just to name a few. The problem of nomenclature is perhaps more significant in exploring the extent of alcohol and other drug use among Mexican American youth. According to Galan (1988), issues surrounding adolescence are exacerbated for Hispanic youth because ethnic identity is a critical component of the process leading to self-identity. The term that is used to describe Mexican American youth will have different implications depending on whether it is selected by the youth or assigned to them.

The manner in which surveys ask youth about their ethnicity is rarely described. Aday et al. (1980) identified several methodological issues for researchers to consider in designing social surveys with adult Spanish heritage populations; however, similar issues unique to the Spanish-heritage adolescent are notably absent. The peer interviewer model described by Bloom and Padilla (1979) and used in surveys of Los Angeles (Padilla et al. 1977; Perez et al. 1979) and San Antonio (Rodriguez-Andrew 1985) housing projects are the exception.

"Minority" Category

Grouping Hispanic subgroups with people of color is fraught with limitations. Invariably, African Americans and Hispanics have been grouped together when a sufficiently large sample prohibits development of separate categories (Mandel 1980; Mandel and Bordatto 1980). Such actions take a simplistic approach to data collection and analysis without considering important cultural and linguistic differences. Insufficient specificity about groups being studied further limits generalization and implications for prevention and intervention programs.

Age and Gender

Existing literature, with some exceptions, fails to provide sufficient detail on the influence of gender and age on alcohol and other drug use and services to Hispanic adolescents (Gilbert and Alcocer 1988; Gilbert and Cervantes 1986*a*; Singer 1987). The tendency to combine males and females without differentiating findings and implications according to gender fails to consider existing research results that clearly suggest gender differences. In relation to age, rarely does a study specify exactly what is meant by youth, and terms such as young teen, older

teen, secondary school population, and adolescent appear synonymous in the literature. Each of these terms represents a variety of population groupings. For example, secondary school populations can cover youth aged 13 to 19, depending upon how school districts decide to group students. However, a 13-year-old will have different developmental needs than a 19-year-old. Failure to specify age groups seriously limits analysis of data and the development of prevention services.

Research Methodology and Sample Selection

Shortcomings related to research designs and implementation seriously restrict generalizations (Chavez et al. 1986; Humm-Delgado and Delgado 1983; Singer 1987; Gilbert and Alcocer 1988) and can be grouped into the following categories: (1) tendency to study school-based populations and exclude dropouts, (2) focus on low-income populations—skewed away from other socioeconomic classes, (3) focus on illicit drugs and away from alcohol, (4) small and nonrandom samples, mostly urban based, (5) overreliance on certain urban areas (Los Angeles and New York) and regions of the country (West and Northeast), and (6) overreliance on quantitative studies—qualitative studies being very rare. These practices limit what is known about Hispanic adolescents who use drugs, including alcohol.

Gilbert and Cervantes' (1986*a*) review of the extent of alcohol use among Mexican Americans typifies the issues associated with defining levels of use and the difficulties of making comparisons. Similar observations were also noted by Chavez et al. (1986). Several authors examined extent of use during various periods of their lives such as past week, last month, last year, and ever used, while others employed quantity-frequency measures. Based on subjects' responses, they were categorized as abstainers, recreational, chronic, or regular users.

Two critical issues should be considered in determining levels of use. First, the levels of use currently employed with adolescents were originally designed for adults. While consumption levels (i.e., quantity and frequency of alcohol and other drug use) provide researchers and practitioners with useful information about alcohol- and drug-related problems, these same levels may be lethal in a younger person.

Abstainers include individuals who have never used, no longer use, or have not used within a specified time such as last month or last year. The practice of aggregating this diversity makes it impossible to isolate factors or combinations of factors that deter or forestall alcohol and other drug use.

Similarly, the categories of social and recreational have been employed to describe adult patterns of drug use, particularly alcohol use. Using these terms with an adolescent population raises the questions "Is there a level of social/recreational alcohol and other drug use for youth?" and "What do we mean by youth?"

Second, surveys of Mexican Americans, for example, include youth ranging in age from 9 years old to graduate students. School surveys have included 6th graders (approximately 11-12 years old) to 12th graders (17-18 years old), although Mexican Americans tend to be older than their same grade peers. From a developmental perspective, issues surrounding use at various periods of their lives may be less clear to a 6th grader than a 12th grader. For example, a 12th grader may not have difficulty recalling events that occurred during the past 6 months, last month, last week, or even last year, but younger children may have difficulty with this concept if it is not placed in the context of other events that were occurring at the same time (e.g., school or family events that trigger recall).

Limitations of Drug Statistics

Three primary factors serve to distort statistics related to Hispanics: (1) reliance on arrest and treatment data (statistics may overrepresent Hispanics and people of color) (Morales 1984), (2) type of drug frequently focused on by enforcement and treatment programs (Humm-Delgado and Delgado 1983; Gilbert and Cervantes 1986*a*) is subject to greater public scrutiny

and research, and (3) undercounting by the U.S. census—particularly in relation to "undocumented" Hispanics. Consequently, the use of drug statistics may overrepresent Hispanics as alcohol or other drug abusers.

A National Perspective

Efforts to provide a historical perspective on patterns of alcohol and other drug use by Hispanics over time, such as the annual High School Senior Survey, are hampered by the lack of specificity in delineating ethnic groups. However, early national surveys endeavored to explore the extent of alcohol and other drug use among the adolescent subgroup defined as Spanish American (Sanchez-Dirks 1978; Wilsnack and Wilsnack 1978) or non-Anglo (Donovan et al. 1983).

A 1975 National Survey of Adolescent Drinking Patterns found that the largest proportion of adolescent drinkers were Anglo (75 percent), followed by American Indian (73 percent) and Spanish American (68 percent). African American adolescents reported the lowest number of drinkers among all the major ethnic groups studied (59 percent) (Sanchez-Dirks 1978).

Wilsnack and Wilsnack's (1978) analysis of a 1974 national survey of drinking practices among students in grades 7-12 found that 38 percent of Anglo girls in grades 7-8 were drinkers. By grades 9-10, 57 percent reported drinking and by grades 11-12, 68 percent drank. Spanish American girls, however, were less likely to drink (31, 49, and 54 percent, respectively). Among Anglo boys, the prevalence of drinkers was 50 percent in grades 7-8, 70 percent in grades 9-10, and 80 percent in grades 11-12 compared to 46, 64, and 84 percent, respectively, for Spanish American boys. Sanchez-Dirks (1978) reporting on the same data set found that Hispanic females were more likely to be abstainers (27 percent) than Hispanic males (21 percent) or Anglo males (15 percent) or females (18 percent). It is interesting to note that while respondents identified themselves as Spanish American, the term Hispanic was used in reporting the findings. Similarly, individuals who identified themselves as white were described as Anglo.

A similar survey conducted in 1978 of 10-12th graders found a lower prevalence of marijuana use among Hispanics. Forty-three percent of Hispanic high school students reported having used marijuana, compared to 54 percent of non-Hispanic white students (Lowman et al. 1982).

NIDA's 1985 household survey measured lifetime prevalence of alcohol and other drug use by race and ethnicity for males and females aged 12-17 (table 1). While alcohol and other drug use was generally lower for both African American and Hispanic female adolescents than for Anglo females, rates of cocaine use were similar for Anglo and Hispanic females. Surprisingly, lifetime prevalence of inhalant use was slightly higher for Anglo females than either Hispanic or African American adolescent females. Early studies found disproportionately higher rates of inhalant use among Hispanic adolescents (Padilla et al. 1977; Perez et al. 1979); however, more recent school surveys indicated that this gap may be narrowing. A Texas survey of 7th-12th graders (N=7,500) found similar lifetime rates of inhalant use for both Anglo and Hispanic students (23.8 and 24.1 percent, respectively) (TCADA 1989). Generally, both Hispanic males and females reported lower levels of use than Anglo youth.

While 39 percent of Hispanic females reported lifetime alcohol use by age 17, three-fourths reported use by age 25 (table 2). Among Anglo female adolescents, 60 percent reported alcohol use by age 17 and 96 percent by age 25. African American females, who reported the lowest lifetime prevalence of alcohol use (34.6 percent) by age 17, also increased use by age 25. Generally, males were more likely to report use of all drugs, although Anglo females and males used alcohol, marijuana, and tranquilizers at relatively similar rates. Hispanic females (aged 18-25) were nine times more likely to report some lifetime use of inhalants than Hispanic males. Eighteen percent of Anglo males reported inhalant use compared to 0.7 percent of Hispanic males and

Table 1.— Comparison of lifetime alcohol and other drug use by ethnicity for youth aged 12-17

	Females			Males		
	Hispanic	White	African American	Hispanic	White	African American
Alcohol	39.2	60.4	34.6	49.9	61.6	44.6
Tobacco	29.8	46.5	26.6	39.6	39.8	51.9
Marijuana	17.9	24.8	10.7	22.5	25.1	24.0
Cocaine	4.9	4.9	1.2	5.5	6.1	4.6
Inhalants	7.9	9.3	3.9	0.8	0.5	7.1
Hallucinogens	1.2	2.5	0.9	2.5	5.0	0.9
PCP	0.6	0.9	0.6	1.5	*	1.7
Stimulants	5.0	6.6	1.4	4.1	6.1	2.7
Sedatives	3.6	5.1	3.0	4.4	1.7	5.6
Tranquilizers	4.2	6.1	2.6	3.4	4.8	2.5

Source: National Household Survey (NIDA 1985).

Table 2.— Comparison of lifetime alcohol and other drug use for young adults aged 18-25

	Females			Males		
	Hispanic	White	African American	Hispanic	White	African American
Alcohol	74.4	96.1	78.4	87.8	96.8	81.9
Tobacco	48.9	79.5	62.0	62.9	69.4	81.1
Marijuana	29.5	64.4	37.0	52.4	65.6	58.0
Cocaine	11.3	24.5	11.0	18.3	52.1	16.3
Inhalants	6.4	11.1	3.2	0.7	18.1	7.2
Hallucinogens	4.7	10.7	1.0	7.7	15.6	4.3
PCP	3.7	5.2	*	2.8	2.6	8.6
Stimulants	6.8	18.9	4.8	7.3	20.6	10.2
Sedatives	5.5	9.0	3.2	7.6	5.6	15.4
Tranquilizers	3.4	13.3	4.2	5.4	14.4	2.5

Source: National Household Survey (NIDA 1985).

7.2 percent of African American males. Although lifetime use of cocaine appears to be relatively similar for both Hispanic and African American female young adults, Anglo females were twice as likely to report lifetime use of cocaine.

The 1987 HHANES reported the prevalence of marijuana, cocaine, inhalant, and sedative use among Mexican Americans, Puerto Ricans, and Cuban Americans aged 12 to 44 (N=8,021). Of Mexican Americans aged 12 to 17, 31 percent reported some lifetime use of marijuana, compared to 26 percent of similar aged Puerto Rican youth. The small sample of Cuban Americans resulted in combining respondents into two age categories, 12-24 and 25-44. Of those aged 12-24, 21 percent reported having used marijuana at some time in their lives. This figure may be misleading because of the large age span.

As with youth in the general population, results from the HHANES study also suggests that drug use among Hispanics increases with age. However, the extent of use for various substances varies among different Hispanic groups. For example, 4 percent of Mexican American youth aged 12-17 reported having used cocaine compared to 18 percent of youth aged 18-24. Among Puerto Rican youth aged 12-17, 7 percent reported lifetime use of cocaine. However, the percentage of youth aged 18-24 who reported having ever used cocaine increased to 37 percent. Among Cubans aged 12-24, 12 percent reported lifetime use of cocaine.

While the 1986 High School Senior Survey found that 21 percent reported some lifetime use of inhalants (Johnston et al. 1987), only 6 percent of the total Mexican American sample reported lifetime use of inhalants. Of youth aged 12-17, 5 percent reported having used inhalants compared to 10 percent of those aged 18-24. Puerto Rican youth were even less likely to report inhalant use—only 5 percent of the total sample reported having used inhalants. Only 2 percent of youth aged 12-17 had used inhalants compared to 8 percent of those aged 18-24.

The use of sedatives was reported by 5 percent of Mexican Americans aged 12-44. Four percent of Mexican Americans aged 12-24 reported having used sedatives compared to 5 percent of those aged 25-44. Among Puerto Ricans aged 12-24, only 3 percent reported the use of sedatives compared to 8 percent of those aged 25-44.

Specific Studies of Alcohol and Other Drug Use Among Hispanics

An analysis of the existing literature on Hispanic adolescents' alcohol and other drug use has been the recent topic of several authors. Three reviews focus exclusively on the extent of alcohol use among Hispanic youth (Gilbert and Alcocer 1988; Singer 1987) and more specifically among Mexican Americans (Gilbert and Cervantes 1986*a*, 1986*b*). The extent of alcohol and other drug abuse among the various Hispanic adolescent groups has been examined by Humm-Delgado and Delgado (1983). Hispanic adolescent treatment issues were described by Delgado (1988), while Gilbert (1986*a*, 1986*b*) and Galan (1988) examined prevention issues. Theoretical considerations focusing on Mexican American youth have been described by Morales (1984).

Trotter's (1982) comparison of Anglo and Mexican American college students from a similar geographical location found lower levels of use among both Mexican American males and females than Anglo American males and females. Mata's (1986) survey of Texas rural youth also found a higher frequency of alcohol use among Anglo (63 percent) than Mexican Americans (56 percent).

While Anglo males reported a higher frequency of alcohol use (63 percent) than Mexican American males (61 percent), the difference was slight. Among females, the differences were greater: 65 percent of Anglo females reported alcohol use compared to 51 percent of Mexican American females. Chavez et al.'s, (1986) survey of rural 7th-12th graders (N=192), however, found higher rates of drug use for all types of drugs except PCP and alcohol. Anglos reported a 6-percent lifetime prevalence rate of PCP use compared to 0 percent for Mexican American students; use of alcohol and smokeless tobacco was only 1 percentage point different for Anglo students (85 and 56 percent, respectively) from Mexican American students (84 and 57 percent, respectively).

Although their results were tentative, compared to a national probability sample, both Anglo and Mexican American rural students were 30 percent more likely to report alcohol use. Generally, Mexican American youth were twice as likely to report lifetime use of marijuana, diet pills, stay awake pills, cocaine, hallucinogens, and tranquilizers than Anglo students. The use of heroin, which appears to have reemerged in recent surveys, was reported by 6 percent of Mexican American students compared to only 2 percent of Anglo students.

While Anglo males reported the highest lifetime use of alcohol (95 percent), they were followed not by Mexican American males, but by Mexican American females (88 percent), Mexican American males (82 percent), and Anglo females (74 percent). Similarly, Mexican American females reported a higher level of marijuana use (56 percent) than Mexican American males (33 percent), Anglo males (21 percent), and Anglo females (17 percent). Among Mexican American females, the substances most likely to be used were alcohol (88 percent), cigarettes (88 percent), marijuana (56 percent), and smokeless tobacco (48 percent). Among Mexican American males, alcohol (82 percent), smokeless tobacco (68 percent), cigarettes (41 percent), and marijuana (33 percent) were more likely to be used.

Studies based in Miami have highlighted the point that Cuban males (like Mexican American males) have a higher likelihood of using drugs than their female counterparts (Page 1980; Santisteban and Szapocnik 1982; Szapocnik et al. 1983). Similar observations have been made pertaining to Puerto Rican male adolescents (Colon 1987; DiBartolomeo 1980; Robles et al. 1980; Velez-Santori 1981).

Substances Studied

Without question, the research literature has favored the study of alcohol use and abuse among Hispanic adolescents. This may be the result of an interplay of several key factors: (1) the availability of alcohol and its relative low cost make its study of prodigious importance, (2) special scholarly efforts at studying this problem through special publications on the topic (9 of the 26 articles cited are the result of two special journal issues), (3) availability of government funds for alcohol-related research, and (4) the topic of alcohol use may be more easily studied than other drugs, although inhalants (Dworkin and Stephens 1980; Rodriguez-Andrew 1985; Rubio 1980; Santos de-Barona and Simpson 1984; Stybel 1977) and heroin (Jimenez 1980; Joseph 1973) have also received attention.

Nevertheless, the literature strongly suggests that Hispanic adolescents generally use more than one drug at a time and can be classified as polydrug users. Interestingly, the professional literature has not addressed the problem of crack among Hispanic adolescents (Kerr 1988*a*, 1988*b*, 1988*c*). This may be the result of publication lag time, since the problem of crack has only surfaced in the last few years.

Survey Settings

Sample populations appear to be evenly distributed among treatment settings (either inpatient or outpatient), schools (ranging from elementary school through college), and community surveys. Although community surveys have generally focused on housing projects, other scholars have surveyed entire communities (Gurin 1986; Santos de-Barona and Simpson 1984; Stybel et al. 1976). The heavy emphasis on studying Hispanic adolescents in treatment settings and schools, as already noted, skews results and makes it difficult to generalize the findings.

Geographic Locations

Almost all regions of the United States have received attention in the research literature on alcohol and other drug use among Hispanic adolescents, even if the Hispanic youth were only part of a broader sample (Humm-Delgado and Delgado 1983). However, an extensive amount of research has been conducted in certain locations, particularly New York City, Texas, Miami, Puerto Rico, East Los Angeles, and New England.

Evaluation Instruments and Research Designs

Self-reports and self-administered questionnaires were the most frequently cited methods of gathering information. Modifications to this approach included the use of peer interviewers (Bloom and Padilla 1979; Padilla et al. 1977; Perez et al. 1979; Rodriguez-Andrew 1985) and counselor observations and evaluations (Santos de-Barona and Simpson 1984). Several authors reported research designs that utilized followup as a central feature of the investigation. Only two studies used secondary data analysis in their studies—Puyo (1980) and Joseph (1973), who augmented his analysis with interviews.

In summary, the above studies have important implications and raise questions for the field of alcohol and other drug prevention. There is a lack of specificity concerning Hispanic background of targeted groups—the label Hispanic does not allow an indepth study of how ethnic differences affect services. Similar observations can be made about age and gender. Use of broad categories seriously undermines any indepth analysis at a time when the field of alcohol and other drug prevention requires greater attention to younger age groups and sensitivity to gender.

The Role of Culture

The importance of using intervention methods that take into account cultural factors is widely acknowledged in the field of human services. The concept of culture encompasses a multitude of factors. According to Axelson (1985), it can consist of any one, or combination, of the following: social structure (organized representation of culture), kinship systems (formal or informal rules that govern status and relation-

ships), personality (integrated patterns of human behavior), psychological adjustment (emphasis on individual relations in the group, with culture being an instrument for meeting collective needs), and socioeconomic class (economic position and possessions influencing group values, feelings and behavior).

For the purposes of this report, the authors used the ethnic dimension of Axelson's classification. Briefly, the professional literature notes three perspectives on the use of culture in intervention:

1. *Ethnic-sensitive practice.* Two important themes shape this approach—ethnicity and social class shape life's problems and influence how solutions are sought, and intervention must simultaneously seek solutions at the microlevel and macrolevel (Devore and Schlesinger 1981).

2. *Ethnic minority practice.* This approach consists of three key dimensions—systematic process or stage approach to practice, generic principles of practice universal to people of color, and the use of case material to develop direct practice continuity through single family case study at various stages (Lum 1986).

3. *Green's (1982) crosscultural awareness practice.* This model attempts to sensitize nonethnic minority practitioners to ethnic minority culture, beliefs, and so forth.

Regardless of the culture-specific model used, several key principles serve as underpinnings in service delivery to Hispanic adolescents and their families: (1) worker commitment to providing culturally based services, (2) awareness and acceptance of differences, (3) self-awareness and self-appreciation, (4) understanding of the dynamics of differences and how they influence the development of a relationship, diagnosis, and treatment intervention, (5) knowledge of a client's cultural background and values, and (6) flexibility in the adaptation of methods and skills to match the client's background (Services to Minority Populations 1988).

Several researchers (De La Rosa 1988; Delgado and Humm-Delgado 1984; Delgado 1987; Valle and Bensussen 1985) have focused attention on the importance of natural support systems within the Hispanic community and noted that any attempt at prevention and intervention must take into account these systems. Delgado and Humm-Delgado (1984) have conceptualized Hispanic natural support systems as consisting of four major types: (1) extended family and friends, (2) folk healers, (3) religion, and (4) merchant and social clubs. Delgado (1987), studying the breakdown of natural support systems within the Hispanic community, noted five possible categories of reasons: (1) the natural support system is in a state of crisis and cannot help the adolescent who is in need of help, (2) the system's ability to respond is limited due to the nature of the need—an Hispanic adolescent with an addiction to crack will severely test a support system, (3) the system may refuse to help an adolescent for a variety of reasons, e.g., adolescents who refuse to help others but do not hesitate to seek help for themselves, (4) the adolescent does not have a support system—this very often is the case with adolescents who have a long history of using drugs or who find themselves homeless and without a support system, and (5) the topic of alcohol and other drug problems may be so sensitive that the adolescent refuses to seek help from family and other support systems. The above typology can play an instrumental role in developing services to reach Hispanic adolescents (De La Rosa 1988; Delgado 1988).

Acculturation and Alcohol and Other Drug Use

The role of acculturation as either a mediating or contributing factor in alcohol and other drug use has received considerable attention in the recent professional literature. However, at this point, there has been much speculation and little empirical data (Gilbert and Cervantes 1986*a*). Language preference is probably one of the most frequently mentioned aspects of acculturation (Padilla et al. 1977; Perez et al. 1979) and has tremendous implications for the language fluency of the counselor assigned to a client. The 1987 HHANES survey reported that higher lev-

els of alcohol and other drug use were found for those respondents (aged 12-44) who preferred to be interviewed in English. While language preferences were not provided by age categories, this finding is consistent with earlier research.

While several measures of acculturation have been developed specifically for Mexican American adults (Cuellar et al. 1979), adolescents (Olmedo et al. 1977), and children (Franco 1984; Martinez et al. 1984), these instruments are designed to assess behavioral factors rather than affective or emotional factors. Further, while issues of acculturation have been explored with adults (Griffith and Villavicencio 1985), the same issues have remained relatively unexplored among youth. Clearly, the role of acculturation in alcohol and other drug use is vague because of the paucity of research studies, diversity of acculturation measures, and samples involving different subgroups. Nevertheless, counselors cannot ignore the potential influence of acculturation on assessment, treatment, and prevention of alcohol and other drug use.

This section of the literature review has raised promising areas for further study. The importance of culture as a key element of any prevention effort requires prodigious attention to how this concept is defined, operationalized, measured, and analyzed. The use of culture-specific programming and techniques necessitates a clear understanding of how culture is used in reaching Hispanics. Nowhere is this more apparent than in the study of acculturation and its impact on alcohol and other drug use. In short, *culture must represent the cornerstone of any serious effort at preventing alcohol and other drug use and abuse.*

Risk Factors Among Hispanic Youth

Epidemiologists define risk as the probability that a given event will occur (Bell 1988). Risk factors or correlates associated with drug use have been the topic of recent extensive analysis (Fraser 1984; Murray and Perry 1985; Hawkins et al. 1986; Kumpfer and DeMarsh 1986; Kumpfer 1987). Generally, risk factors have been grouped into four broad categories: demographics, social environmental, intrapersonal, and behavioral factors (Murray and Perry 1985). The majority of research, however, has focused on demographics, intrapersonal, and behavioral factors. Relatively little is known about environmental risk factors. Bell (1988) recently proposed a methodological strategy for identifying characteristics and geographic locations of high-risk population groups. While risk factors associated with individual drug use are an important consideration, Bell (1988) argued that knowledge would be greatly enhanced if additional information about the locations of high-risk environments were also known.

Our understanding of factors associated with the use of alcohol and other drugs among Hispanic youth is relatively poor when compared with our knowledge about youth in the general population (Hawkins et al. 1986; Kumpfer and DeMarsh 1986; Newcomb and Bentler 1988). Several factors have been associated with alcohol and other drug use specifically among Hispanic youth, however, in studies that point the way for further research in this area. These factors tend to cluster into three broad categories: (1) family, (2) socioenvironmental, and (3) interpersonal. Each of these categories, in turn, encompasses several different dimensions. As with existing studies of risk factors, the literature on Hispanic adolescent alcohol and other drug use does not identify any one risk factor as being the cause or exercising greater influence on subsequent alcohol and other drug use. Interestingly, the literature does not note the presence of several other risk factors commonly used in looking at adolescent alcohol and other drug use. The absence of these factors, however, may be attributed to the lack of research in this area rather than their deliberate omission from current investigations.

Family

Several studies noted that Hispanic youth have a higher likelihood of using drugs if parents or older siblings abuse alcohol and other drugs (DiBartolomeo 1980; Dworkin and Stephens

1980; Estrada et al. 1982). Family disintegration as a result of an absent father, frequent family disagreements, poor communication, and unclear expectations of parents were also prominently noted in the literature. Family religiosity (i.e., church attendance, importance of religion, and religious views associated with alcohol consumption) was also noted as being influential in determining the use of alcohol and other drugs. However, findings from two studies were contradictory—Estrada et al. (1982) found religiosity to be associated with alcohol consumption for females and not males; Guinn (1975) found alcohol consumption to be positively associated with church attendance—unfortunately, his study did not control for gender (Gilbert and Cervantes, 1986*a*).

Socioenvironmental

This category can best be divided into (1) the impact of poverty, (2) availability of alcohol and other drugs, (3) schools, and (4) the influence of peers. Only a few authors noted the impact of poverty, as manifested by limited upward mobility opportunities, as a key risk factor in alcohol and other drug problems. This is in stark contrast to the importance attached to this factor by the OSAP grants that were reviewed. The availability of alcohol and other drugs within the community appeared frequently in the literature—in short, very prevalent, easily obtainable, with relatively minimal legal risk for the consumer. Another dimension to this issue was raised by Dworkin and Stephens (1980) who noted the importance of a prevailing coping style within a community as influencing risk-taking behavior involving drugs. Other authors raised the role of subcultures reinforcing drug use and abuse (Nuttall and Nuttall 1981; Padilla et al. 1977; Perez et al. 1979). School performance has been cited as an important influence on Hispanic adolescent attitudes and behavior toward alcohol and other drugs. Absenteeism, low educational achievement, and acting-out behavior in the classroom are often associated with drug use. Finally, the impact of peer influence has received considerable attention and affirmation in the literature.

The above risk factors have been prominently noted in OSAP literature and grants. However, the professional literature does not identify, in any meaningful way, suicide attempts, mental health problems, child abuse and neglect, and physical disability as risk factors for alcohol and other drug use among Hispanic adolescents. Is it because these factors are not present in the Hispanic community? Or are community-based agencies unwilling or unable to address these issues? Further research is recommended to examine these questions.

Analysis of the OSAP Programs

The Hispanic demonstration grants funded through OSAP's Early Intervention Initiative cover a wide variety of settings, geographical locations, age groupings, risk factors, and intervention approaches. The following analysis, derived from the grantees' applications and responses to the Site Visit Evaluation questionnaire (see appendix), provide a flavor of the diversity of this group and the challenges faced in meeting the needs of Hispanic youth, families, and communities.

Geographic Locations

One-fourth of the OSAP projects are located in Texas, followed by New Mexico and Arizona with three projects each (table 3).

Table 3.— Geographic distribution of OSAP projects for Hispanic populations (N=16)

Texas	4
Arizona	3
New Mexico	3
Puerto Rico	2
Washington, DC	1
Maryland	1
California	1
Illinois	1

Settings

Almost two-thirds of the projects are community based. Two of the projects are located in educational settings: a University (homeless children) and an inner-city middle school (adolescents currently in school).

Target Populations

Ethnicity

The projects reflect the same lack of specificity that characterize the literature on Hispanic populations. Ten of the sixteen projects describe their populations as "Hispanic," followed by "minority" and "Hispanic of Mexican origin." Two programs specifically describe their target populations as "Mexican American," and one differentiates among three target groups: Puerto Ricans, Cuban Americans, and Mexican Americans. The criterion for the differentiation, however, is based on geographic location.

Gender

Only two projects, both of which are residential treatment services, specifically identify their target populations as female. One project indicates that prevention services will be for both "boys and girls," while the remaining projects make no distinction based on gender.

Age Groups

Groups targeted for prevention services range from preschool children (aged 2-5) to the more general population defined as anyone under age 24. Almost one-third of the projects identify at least two age groups as targets of services but with a significant gap in ages. One-fourth of the projects target youth beginning at age 8; three projects begin with preschool children.

Of the projects that specify a target population either by school level or age group, it appears that elementary and middle-school aged children are the primary targets of prevention services. Integration and inclusion of age-specific developmental issues such as level of comprehension and verbal and cognitive skills are addressed by two projects.

Groups Targeted For Prevention Services

One of the most critical aspects in providing services for high-risk youth is the attention given to delineating target groups. Historically, youth have received prevention services in schools. All 16 prevention programs cited in the recent Triennial Report on Drug Abuse for reporting decreased levels of cigarette smoking were school based (NIAAA 1987). Similarly, Flay's (1985) recent historical review of the social-influences approach indicates that the majority of data were derived primarily from youth in school settings.

While school plays a significant role in the lives of the majority of youth, research suggests that high-risk youth report higher rates of absenteeism than youth in general. Absenteeism may be attributed to a number of factors including dropping out of school, retention (i.e., failed one or two grades), illness, and truancy that influence whether high-risk youth will be in school during the administration of surveys or during the implementation of prevention services. This decreasing probability of inclusion is particularly critical for Hispanic children.

The 16 OSAP grantee programs for fiscal year 1987 reflect a diversity of referral sources or targets of services that include groups of youth known to reflect higher rates of alcohol and other drug use. With the exception of three projects that focus exclusively on school populations, high-risk youth are identified from such diverse sources as juvenile justice, mental health clinics, local and State social service agencies, public housing, and community-based organizations. All but one of the projects include schools as sources of referrals. Seven of the projects specifically include children of alcohol and other drug abusers as a target group.

Of the three school-based programs, only one targets a general school population. The others specifically target experimental alcohol and other drug users and youth at risk of dropping out of school within the school setting.

This diversity of youth, however, also indicates diversity in the extent of alcohol- and other drug-related problems. For example, half of the projects target youth known to the juvenile justice system; three programs include youth living in public housing. Almost all programs include youth known to local community-based organizations that provide a myriad of services ranging from afterschool programs to medical services. Additional target groups included abused and neglected children known to State agencies responsible for coordinating community support services. Thus, while schools continue to be a major vehicle for accessing youth, these OSAP projects have expanded their target groups to include high-risk youth with vulnerability characteristics similar to those described by Kumpfer (1987) in addition to less vulnerable youth.

Taking Account of Risk Factors

An *OSAP Newsletter* (Summer 1988) provided descriptive information about the high-risk populations targeted by the OSAP-funded projects. Table 4 shows the percentage of high-risk factors addressed in the target populations funded by OSAP.

The OSAP programs that primarily target Hispanic youth reflect emerging knowledge about Hispanic youth. The most prominent high-risk factor cited by the grantees is their focus on economically disadvantaged youth (94 percent). Figure 2 profiles the emerging family risk factors cited by the grantees.

Poor school performance and school failure have been found to be positively associated with alcohol and other drug use (Jessor 1976; Robins 1980), although Kandel (1982) reported that the combination of factors leading to poor school performance were more likely to be associated with subsequent alcohol and other drug use than the school performance itself. More than half of the Hispanic youth targeted for prevention services have either dropped out of school or are at risk of dropping out.

Table 4.— High-risk factors in OSAP-funded programs (N=130)

Risk factor	Percent
All risk categories	5
Gateway drug use	30
Economically disadvantaged	42
School dropout	21
Committed violent/delinquent act	22
Children of substance abusers	32
Abused/neglected	18
Pregnant teen/teen parents	17
Homeless, runaway	5
Mentally ill, suicidal	9
Physically disabled	8
Unknown	8

Source: OSAP Newsletter (Summer 1988)

About two out of five Hispanic youth targeted by these OSAP programs are children of alcohol or other drug abusers or have been physically abused or neglected. Although caseworkers consistently find a history of alcohol and other drug abuse in families where children have been abused or neglected, the exact nature of this relationship has yet to be fully explored (Kumpfer 1987). The literature on children of alcohol and other drug abusers has proliferated since the 1960s, but relatively little is known about Hispanic children of such parents.

Assessment of Risk Factors

Fourteen of the sixteen projects use the high-risk factors synonymous with descriptions or characteristics that reflect their target population as opposed to screening for prevention services. The majority of projects do not indicate how they determined or assessed these risk factors in their target populations. Although several of the high-risk factors can be observed, some are more difficult to determine.

One project operationally defined "economically disadvantaged" as those families meeting eligibility for participation in the Headstart program. The CAST (Children of Alcoholics Screening Test) developed by Pilat and Jones (1983) is used by one project to identify children of alcoholics. The screening instrument, which has reported high reliability, is limited to parental drinking problems and does not include other types of parental drug use. Another project is using data gathered from a self-administered questionnaire to determine assignment to one of three prevention services based on level of alcohol or other drug use (i.e., nonuse, experimental, and regular use).

Youth reporting experimental or gateway drug use are identified from other sources such as juvenile justice or schools, who basically catch the youth in the process. Similarly, abused and neglected children are those children known to social service agencies.

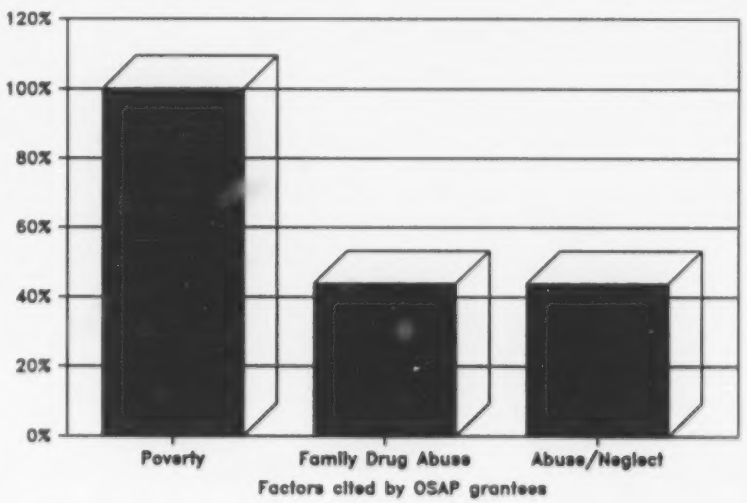

Figure 2.–Emerging family risk factors

Prevention Approaches

Two of the projects utilize existing prevention approaches with their target populations. One is a replication and modification of the Seattle Social Development Model developed by Hawkins and his colleagues (1986). The second implements some of the training methods of the "Magic Circle" program developed by Human Development, Inc., in 1972. While both programs have been the subject of several evaluation studies (Durell and Bukowski 1984), no data indicate whether these programs have been effective with Hispanic youth.

The remaining 14 programs use prevention approaches ranging from the development and dissemination of bilingual materials from the national "Stay Smart! Don't Start!" campaign to residential treatment services. The majority of programs have a comprehensive focus in their prevention strategies and include training key professionals such as teachers, law enforcers, and clinicians to identify and refer youth to appropriate services. Parents have also been targeted by almost one-third of the programs.

Two programs include residential services for females, and one provides day treatment services for both males and females. All three programs include the development of curriculum materials for youth or professionals.

Almost half of the programs indicate that a specialized curriculum will be developed for their target populations. The number of prevention sessions range from 8 to 10. Apparently, these sessions will include culturally relevant information as well as strategies designed to address peer pressure. While none of the programs specifically identify what is considered culturally relevant, they do suggest that their intervention approaches will be guided by parameters of culturally relevant services such as language, additional resources and support, and geographic locations to match target populations. These projects include additional strategies such as training in ESL (English as a second language), employment, specific math skills, GED, and defensive driving to augment and enhance specific alcohol and other drug prevention approaches. These additional approaches are consistent with the risk factors identified both in the literature and by the OSAP grantees.

One-fourth of the projects employ peer leaders and peer training as a strategy, and most include alternative activities for youth that tend to utilize natural support systems within Hispanic communities. The use of natural support systems for Hispanic youth has not been fully explored (De La Rosa 1988).

Three of the projects are using innovative approaches such as a mentor program that matches successful adult role models with youth, intensive structured weekend family retreats, and drama or puppetry with young children. None of these approaches has been used with youth in general. However, they appear to address the high-risk factors that characterize their target populations.

Anticipated Program Outcomes

The majority of program outcomes appear consistent with the high-risk categories emerging in the literature; most focus on the areas of school, family, and interpersonal skills. Collectively, the prevention strategies are intended to (1) improve family and peer relationships, (2) improve youth's social skills as well as their parents' parenting skills, (3) reduce alcohol- and other drug-related offenses and behaviors, (4) increase knowledge and awareness of the effects of alcohol and other drug use, (5) decrease frequency/quantity of reported drug use, and (6) increase self-esteem.

All but one of the programs indicated that pretesting and posttesting will occur; however, the factors or items that will be included were not always specified. Three projects indicated that they will use standardized instruments as part of their data collection plan. Given the diversity of the age groups, the selection of instruments may be problematic.

Finding appropriate instruments is particularly difficult for programs targeting youth with such characteristics as economically disadvantaged and school failure. Bobo et al.'s (1985) assessment of refusal skills for Native American youth covered several issues that are also salient for Hispanic youth, such as lower reading levels and variation in culturally appropriate refusal skills.

Rather than relying solely on paper/pencil data, Bobo and her colleagues developed a series of cartoons to depict refusal skills for various situations. Similarly, Schinke and his colleagues (1988) developed a "bicultural competence skills approach" for the prevention of alcohol and other drug use among Native American adolescents. Whether these approaches are applicable to Hispanic youth is unknown.

Several of the projects are using evaluation expertise outside of their respective agencies to assist in the development of a program design that will enable them to document program outcomes.

Major Project Themes

An analysis of the 16 grant applications and the site visits identified several common themes in the grantees' roles in their respective communities, organizational issues, and intervention approaches.

Community

1. Active community support was evident with most projects. Several projects were highly successful in getting community support due, in part, to the following reasons:
   - Longstanding involvement in providing community-based services
   - A strong philosophical foundation emphasizing community support
   - Extensive collaborative agreements with community-based organizations
   - A willingness to sponsor community festivals, events, and education
   - Facilities based in the community, thus facilitating access
2. With very few exceptions, outreach to the community was a prominent part of programming. A variety of strategies and techniques were used in this effort, with the following representing the most frequently cited and most successful:
   - Special agreements with other community-based programs to facilitate referrals
   - Sponsoring of dances
   - Active use of religious institutions to disseminate program information and to serve as a base for service delivery
   - Having well-known Hispanic leaders sponsor events—for example, one program used the Puerto Rican singer Jose "Cheo" Feliciano as a program sponsor
   - Provision of workshops for key providers
   - Radio announcements
   - Newspaper ads and stories
   - Videotapes to be used in schools and other settings
   - Special printed materials in Spanish and English targeted to Hispanic communities
   - Active use of program participants/parents to enlist the support of others
3. Unfortunately, many of the projects have not addressed the issue of youth gangs in a planned and systematic manner. Several sites stated that gangs were not present in their communities; others noted that gangs were present and that attempts to work with them have been informal. Nevertheless, the presence of gangs is difficult to approach, and this was noted in most of the site visits.
4. The topic of intergroup and intragroup tensions among Hispanics was mentioned by several projects. One site noted tension between different Hispanic group participants and staff; another noted tension between participants from rural and urban backgrounds. Yet another raised the issue of tension between legal and undocumented

participants. Invariably, project staff addressed these tensions on an as-needed basis, and no effort has been made to anticipate potential differences prior to recruiting participants and staff.

5. In examining the abuse of alcohol and other drugs among project participants, one major theme emerged—polydrug use. Marijuana, alcohol, LSD, inhalants, crack, and cocaine were the most frequently used. This finding agrees strongly with the professional literature. It is important to note that crack was only mentioned by one project, and it was not significant in the other sites.

6. In general, no site addressed Hispanic natural support systems in a planned and systematic fashion. All of the sites attempted to involve families, both immediate and extended. In addition, several projects attempted to use religious institutions in some form. However, the use of natural support systems has not been conceptualized as a valuable caregiving system; as a result, these systems have not been prioritized in the delivery of services to Hispanics.

7. Project sites used multiple sources of referrals, with community-based organizations, schools, and juvenile justice sources being the most frequently mentioned. Projects that stressed active community participation also used the most sources of referrals. This network is essential in trying to reach all sectors of the community.

Organization

1. Three key factors were cited by OSAP projects regarding delays in implementation: (1) difficulty in recruiting and retaining Hispanic staff, (2) difficulty in developing working agreements with important sources of referrals such as schools, and (3) the need to develop new forms, materials, videos, recordkeeping systems, and procedures. Several of the projects had great difficulty in carrying out objectives outlined in their grant proposals.

2. Few projects use advisory committees. Where they do, it was not clear what impact, if any, they have had. There were instances where advisory committees had not met during the entire funding period. Thus, a potential source of assistance is either poorly utilized or not being utilized at all.

3. The nature and mixture of staffing generally reflected a paraprofessional focus (or B.A. or graduate degree in a non-human service field) and a multidisciplinary approach—this is due to difficulty in recruiting Hispanic staff rather than a philosophical rationale.

4. OSAP projects have generally had a positive impact on the host agencies by providing an important dimension to service delivery, particularly in settings that provide mental health services. Several situations occurred where the projects had experienced difficulty from other agency components fearing that clients would be taken from other services. However, this was not a major barrier in these settings.

5. OSAP projects were generally in multifaceted agencies that provided a wide range of services. This facilitated the referral to and from OSAP projects and increased the likelihood that Hispanic youngsters received a variety of assistance—an important aspect since Hispanic youngsters had multiple needs.

6. OSAP projects were based in the community and provided easy access to those seeking services. Several projects developed interagency collaboration to station staff in other sectors of the community to increase accessibility. This represents a very important aspect of any effort to reach the Hispanic community.

7. The use of culture-specific material, with some exceptions, lacked detail and conceptualization. Rarely was the concept of culture operationalized in a clear and forthright manner. For example, intake forms varied very little from that found in

most Anglo agencies. Questions pertaining to culture and ethnicity, when present, did not attempt to elicit indepth information that would be helpful in the assessment and intervention aspects of service.

8. The OSAP projects were generally quite active in developing interagency agreements with a wide range of settings. They were engaged in one or more of the following types of collaboration: (1) fiscal linkages—purchase of services through subcontracts, (2) personnel practice linkages—staff outstationing and relocating, (3) planning and programming linkages—information sharing, joint planning, joint programming, (4) administrative support services linkages—recordkeeping, (5) core services linkages—outreach, referral, followup, and (6) modes of case coordination linkages—case conferences, case coordination, and case teams.

9. The topic of acculturation was rarely addressed in a planned and systematic manner and was not integrated into service delivery. In fact, when addressed, it was at the discretion of the intake worker or counselor.

10. The influence of gender was noted in a few of the site visits. In one instance, males were greatly outnumbered in a group but were much more vocal than females. Gender was a consideration in hiring of staff, but gender differences were minimized in counseling and other activities.

11. Age had a significant influence on the development of activities and materials. There was an active attempt to group participants according to age category, e.g., early adolescence.

12. Several projects maintained a strong and active relationship with law enforcement and juvenile justice institutions. One project attempted to organize the community to report drug transactions; the same project received 30-50 referrals per month from juvenile courts. Other projects had either minimal or no working relationships with these institutions.

Summary and Recommendations

The following recommendations are based on the review of the 16 proposals funded by OSAP during fiscal year 1987. The program applications were reviewed and site visits were made to several of the projects during the summer of 1988. While the programs were reviewed at the end of their first year of operation, they offer an opportunity to explore emerging strategies and methodologies for working with Hispanic youth.

Recommendations are presented in the areas of research, treatment, and prevention. General and programmatic recommendations based on the site visits to the programs are also included.

Research

1. More studies in settings outside of treatment, court, and prison sites are needed to determine accurate prevalence of alcohol and drug use. Further, researchers should experiment with innovative techniques such as those developed by Bloom and Padilla (1979) that used Hispanic adolescent peer interviewers.

2. Longitudinal studies are needed to obtain an indepth understanding of changes in patterns of use over time; these would allow researchers to hypothesize about the impact of the social environment on alcohol and other drug use, e.g., drug availability, fads, and regional shifts due to population shifts.

3. Researchers must clearly define the variables that enter into the dimensions of "Hispanic" or "minority." Failure to delineate these terms seriously limits the generalizability of the findings.

4. Increased research activity is needed regarding various Hispanic subgroups and substances. Mexican Americans, for example, have received a disproportionately low amount of research, and relatively little is known about the impact of newer drugs such as crack on the community.

5. Research projects that endeavor to study the interplay of gender, age, and acculturation are lacking. The definition of acculturation used by researchers at the Spanish Family Guidance Center (Miami, Florida) is probably the most accepted in examining acculturation and alcohol and other drug use. However, more research is needed to examine whether this definition is applicable to other Hispanic groups.

6. There is a need for projects that seek to examine the relationship between alcohol and other drug use and risk factors related specifically to Hispanic youth.

7. Greater specificity is needed in evaluation plans for this kind of demonstration program. If evaluation/outcome studies are to be part of a grantee's application, resources (technical assistance) might be made available to the grantees prior to submission of the grant application. A helpful tool would be a publication containing data collection instruments.

8. Specific information on environmental factors is lacking. Existing research indicates that Hispanic communities have higher rates of liquor establishments, crime, and alcohol- and other drug-related arrests (Gilbert and Cervantes 1986*a*, 1986*b*). Most of the projects did not provide information on these factors, even though they were evident during the site visits.

9. Relatively little is known about who provides prevention activities to youth—particularly high-risk youth. Funding sources might explore the feasibility of a project that would examine the characteristics and backgrounds of staff involved in providing

prevention services to Hispanic adolescents.

10. The target population's involvement with alcohol and other drugs should be more specifically delineated. For example, gateway drug use was cited by several projects; however, the extent of the drug use was unknown. Youth who have a history of regular drug use are significantly different from the youth who report having used once or twice.

Treatment

1. Demonstration projects have the potential to provide leadership in developing and implementing culture-specific intervention approaches and techniques. Delgado (1988), for example, has developed a framework for a culture-specific intake of new clients. Other culture-specific approaches should be encouraged.

2. Treatment programs must endeavor to develop linkages with other formal and informal (natural support) systems and providers within the Hispanic community. Clearly, the socioenvironmental issues associated with Hispanic alcohol and other drug use require a multifaceted approach to intervention. Funding sources need to stress collaborative efforts whenever possible.

3. Demonstration projects should be encouraged to use a variety of treatment modalities, with special emphasis on families and groups in addition to the more traditionally focused efforts.

4. Greater specificity is needed concerning the relationship of risk factors, alcohol and other drug use, and interventions designed to address the risk factors.

Prevention

1. Projects that support and interest Hispanic youth in remaining in school are needed, beginning at an early age. Although most of the OSAP projects have school-based components, few have specifically addressed advocacy efforts on the part of the community to make schools more sensitive to Hispanic students.

2. Case studies of successful projects and other materials need to be disseminated to State agencies, schools, universities, other funding sources, and community-based agencies to aid in program development.

3. Demonstration projects that emphasize the development of models of services that collaborate with law enforcement and juvenile justice systems are needed. Alternatives to the court system must also be explored in an effort to divert Hispanic youth into more therapeutic-educational programs.

4. Hispanic natural support systems should be used in prevention approaches. For example, religious organizations or the extended family can be educated to the realities of alcohol and other drug use in order to support adolescents in withstanding peer pressure.

5. Innovative outreach models that are effective in attracting and retaining Hispanic youth in programs are needed.

6. Projects that seek to work with gangs in an effort to address alcohol and other drug problems among members and potential members are needed. Clearly, gangs are a force to be dealt with in any prevention effort addressing inner-city Hispanic youth.

7. Funding sources can play a leadership role in helping to design and implement strategies for getting community support for alcohol and other drug prevention programs. This can be accomplished through special funding of efforts that specifically address this aspect of programming and research.

8. Innovative community education campaigns that are not borrowed or modified from current Anglo efforts need to be developed. This is particularly important since Anglo-oriented campaigns do not take into

account the role of ethnicity/culture in the development and delivery of alcohol- and other drug-related information.

9. Greater attention is needed in the development of prevention materials targeting Hispanic communities.

General and Programmatic

1. Demonstration projects must avail themselves of technical assistance as much as possible. The initial startup period is particularly important. Technical assistance can consist of such activities as staff development through inservice training, development of culture-specific intake forms, and other aspects of recordkeeping.

2. Publications that reflect the collective wisdom of experts in the field of Hispanic alcohol and other drug prevention need to be developed and disseminated. This material, in turn, should be widely distributed to State agencies, universities, and community-based programs to aid in their efforts to better meet the needs of this population.

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Appendix
OSAP Site Visit Evaluation Questionnaire

OSAP Field Visit:

Date: _____

Name of Agency: _____

City and State: _____

Key person(s) being interviewed: _____

I. COMMUNITY

1. How successful has the program been in getting community support and involvement?

2. What special outreach methods and models have been utilized? Suggestions?

3. How are gangs addressed in the project?

4. What are any intergroup and intragroup tensions among Hispanics? Other ethnic groups? If so, how have they been avoided or addressed?

5. What are the key substances addressed by the project? What about the others?

6. What is the nature and extent of natural support system involvement?

7. What are the key sources of referrals? Are they different from what was indicated in the grant proposals?

8. Other comments:

II. INTERVENTION

1. Nature of culture-specific materials (copies if available)?

2. Are there any special considerations in developing and maintaining records pertaining to the project? (Copies of forms)

3. Nature and extent of interagency collab-_oration.

4. How are acculturation themes defined and addressed in counseling and services?

5. How are gender differences addressed in the development and implementation of the project? (Staff and client) (Percentage of male and female participants)

6. Nature and success of involving law enforcement/juvenile justice in the project.

7. How is age addressed in the development and implementation of services?

8. Is Hispanic background addressed in the development and implementation of services?

9. What risk factors are being addressed? How are they screened?

10. Staffing considerations, i.e., bilingual/bicultural, education, training, gender, Hispanic background.

11. Other comments:

III. ORGANIZATION

1. Has implementation occurred as per time tables? Any issues that have emerged? Any factors that facilitated the implementation of the project?

2. How helpful have advisory committees and board of directors been? Specify.

3. Nature and success of staffing mix (professional/paraprofessional; discipline)?

4. Impact of project on other agency services.

5. Nature and function of agency (multifaceted, case referrals, etc.).

6. Setting of project in relation to community (location, accessibility to participants).

7. Other comments:

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NEW PRODUCTS

Three new interactive Hispanic booklets for youth are now available through the National Clearinghouse for Alcohol and Drug Information (NCADI). Published during 1990 by OSAP, the "¡Piénsalo!" series contains the following bilingual alcohol and other drug prevention booklets: *Helping Your Child Say No: Parent's Guide, Helping Your Students Say No: Teacher's Guide,* and *Say No! Stay Smart! Don't Start! Kid's Booklet.* Colorful posters and other bilingual prevention materials for Hispanic youth are also available. To order, telephone 1-800-SAY-NO-TO-(DRUGS). In Maryland and the Washington DC metro area, call 301-468-2600.

OSAP

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